

Replacement Sheet

Serial No.: 09/804,110
FIG. 1

Filed: 03/12/2001
Sheet 1 of 11

Typical Minimum Acceptable Bit Error Rates

Bit Error Rate and Error Correction Criteria:

Typical Minimum Acceptable Bit Error Rate

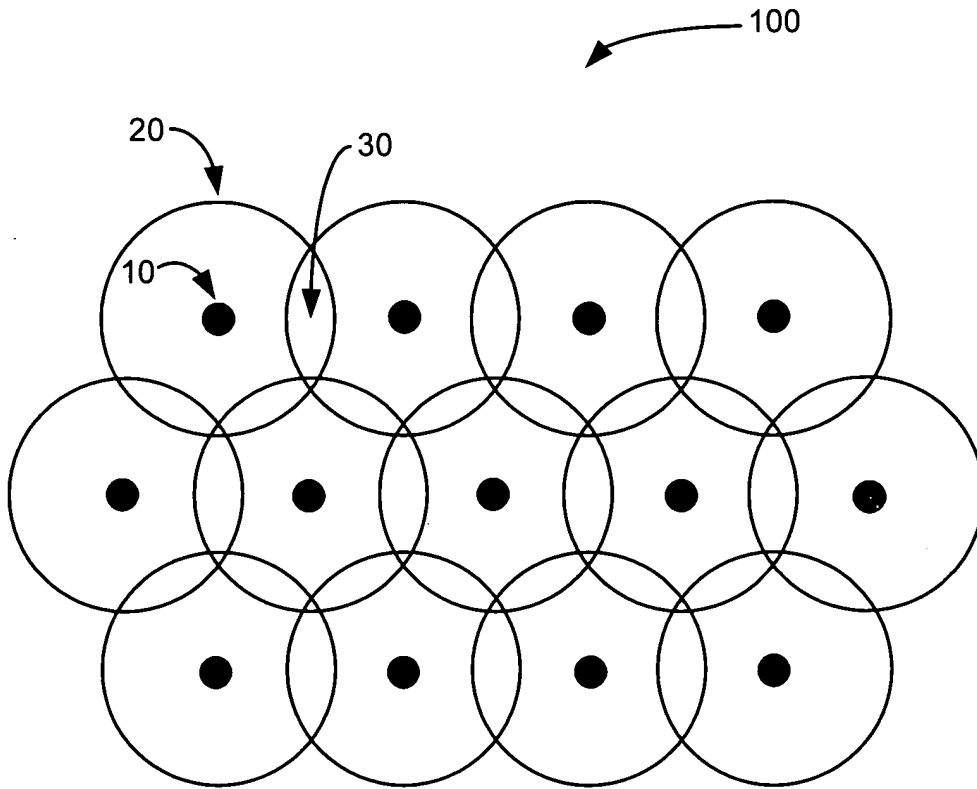
Video: 10^{-5} BER

Audio: 10^{-3} BER

Data: 10^{-10} BER

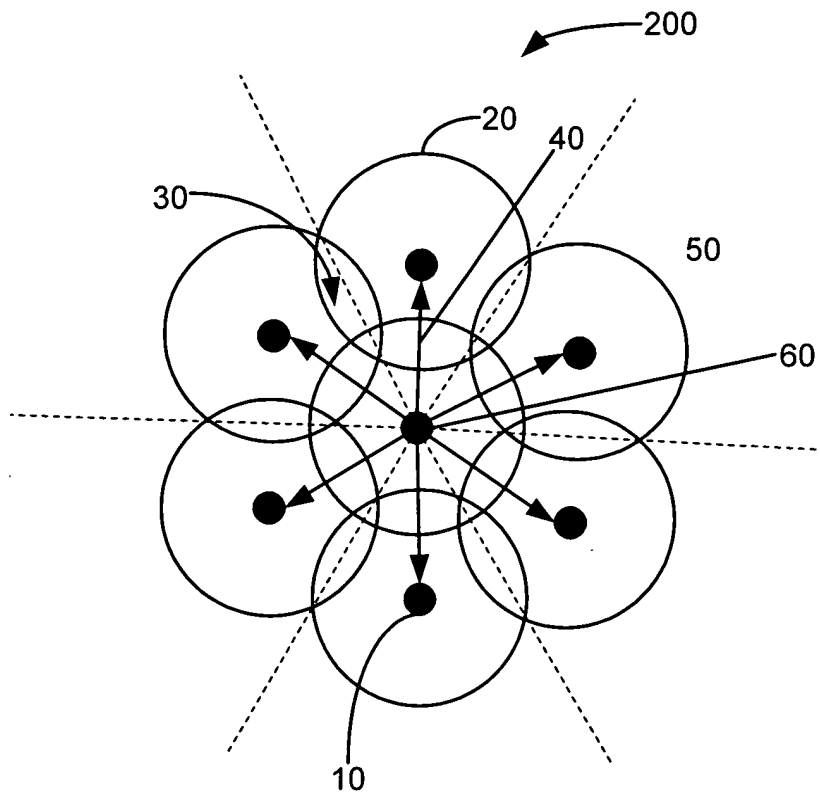
FIG. 1





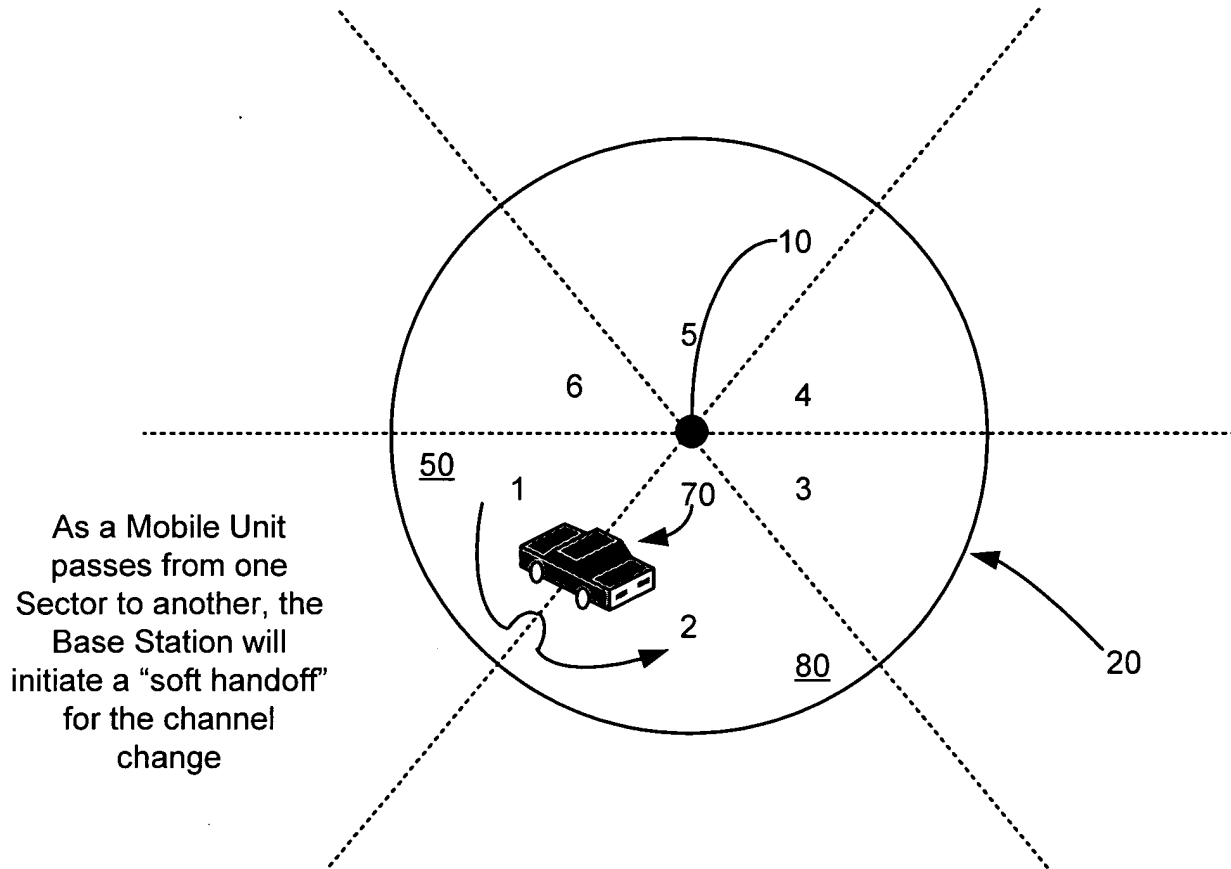
Base Station Architecture
(showing overlapping coverage)

FIG. 2



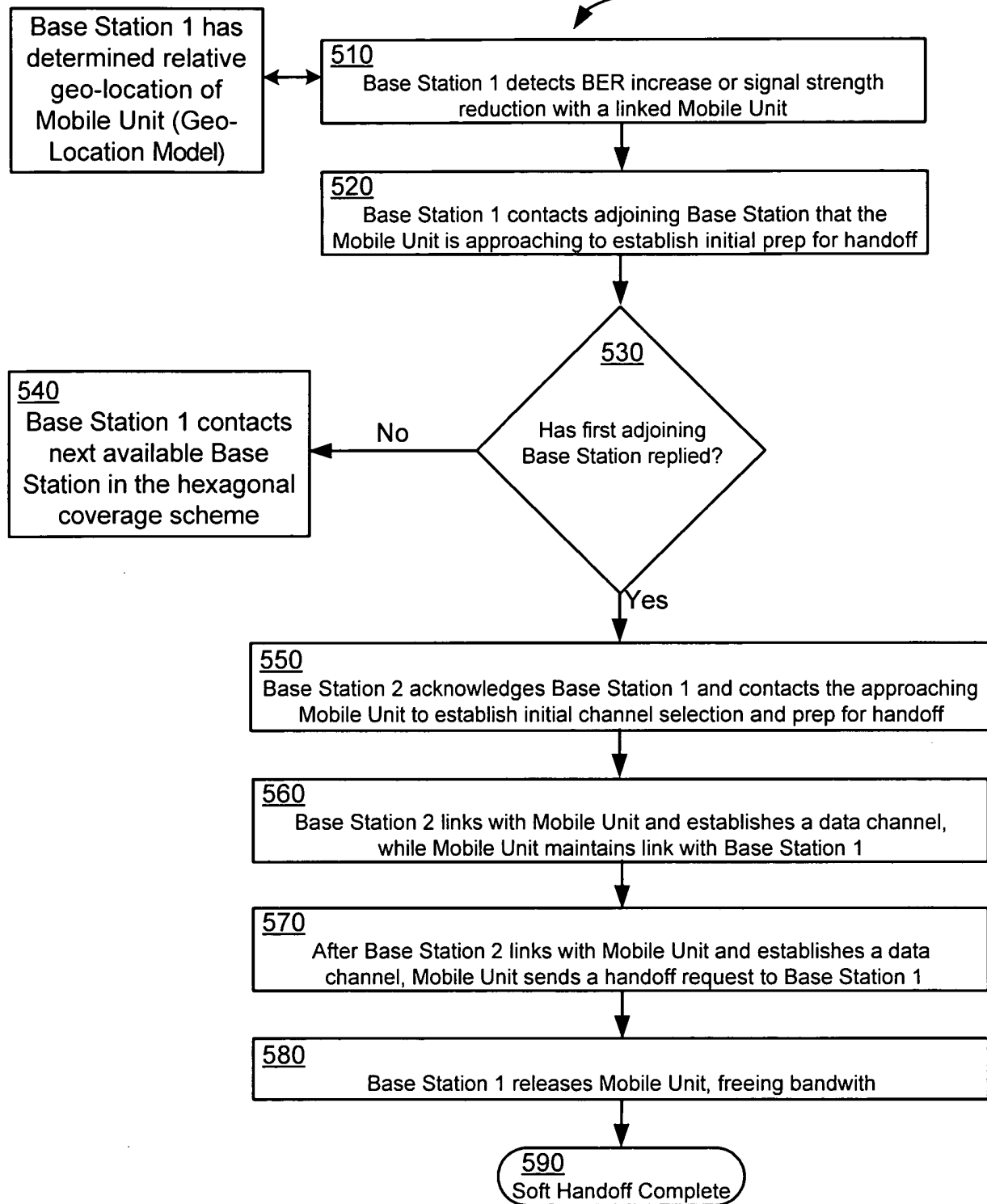
Single Base Station Architecture
(showing connectivity to six other Base
Stations for handoff and channel co-ordination)

FIG. 3



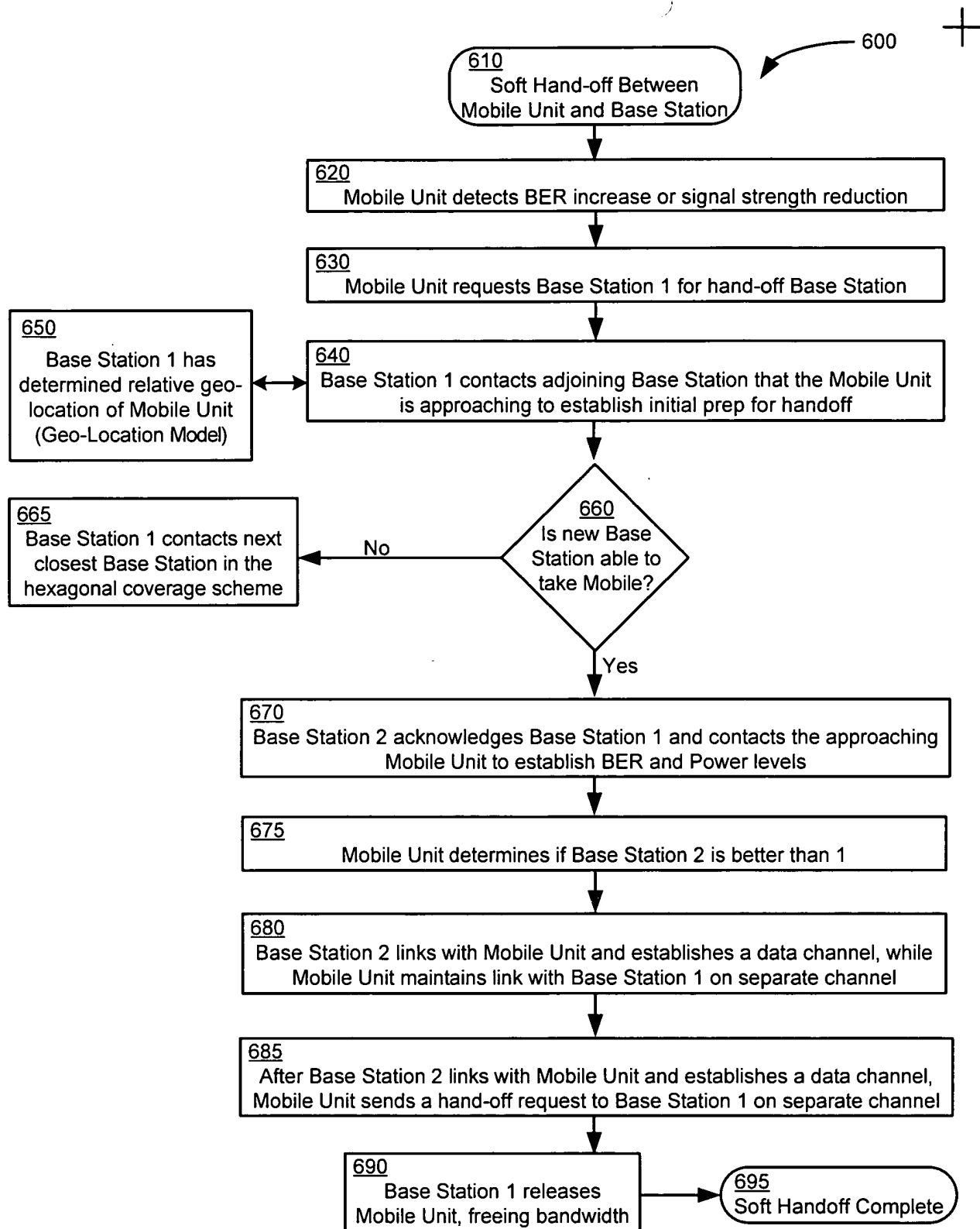
Sectorization at UWB Base Station

FIG. 4



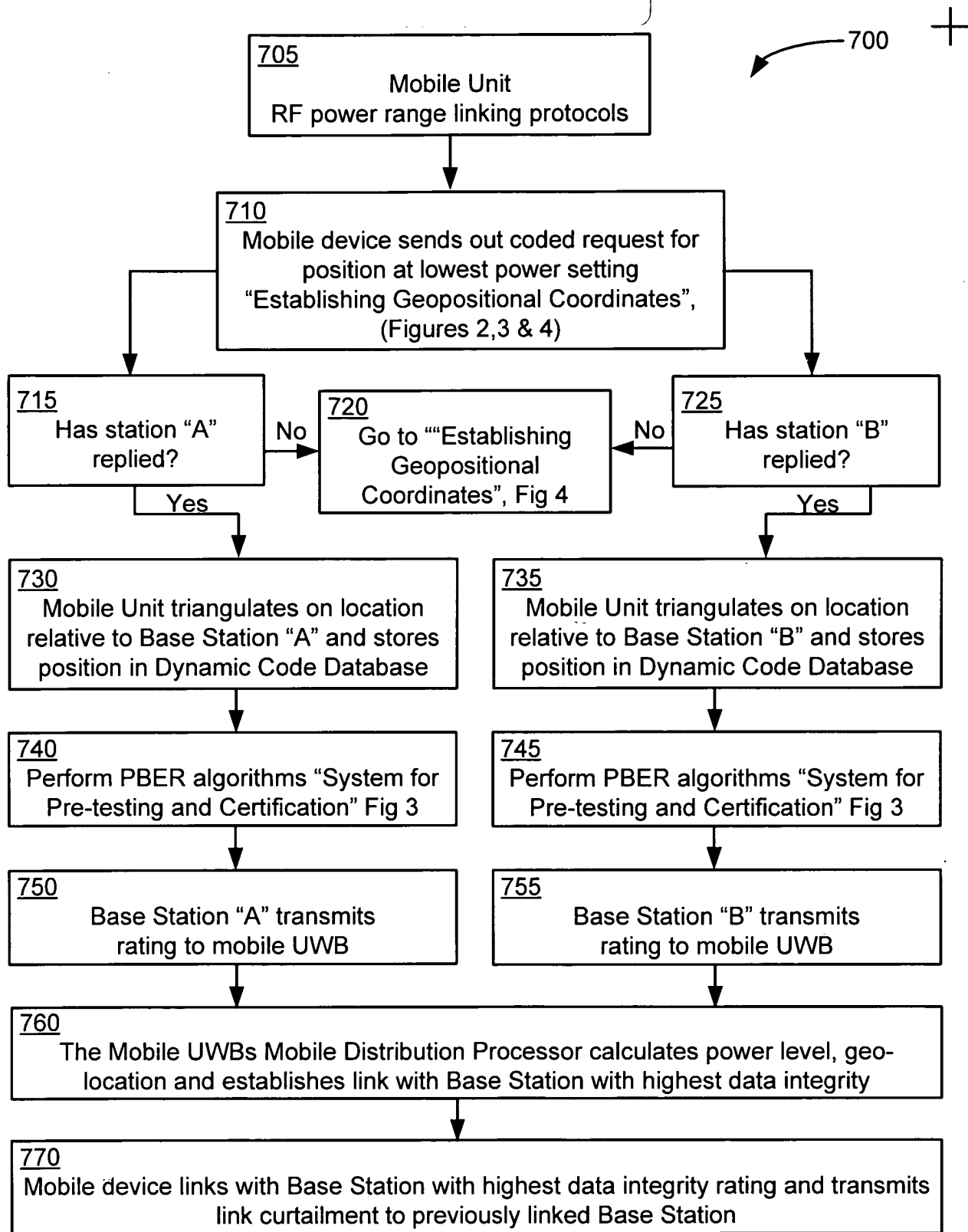
Soft Handoff Scenario #1: Base Station to New Base Station to Mobile Unit

FIG. 5



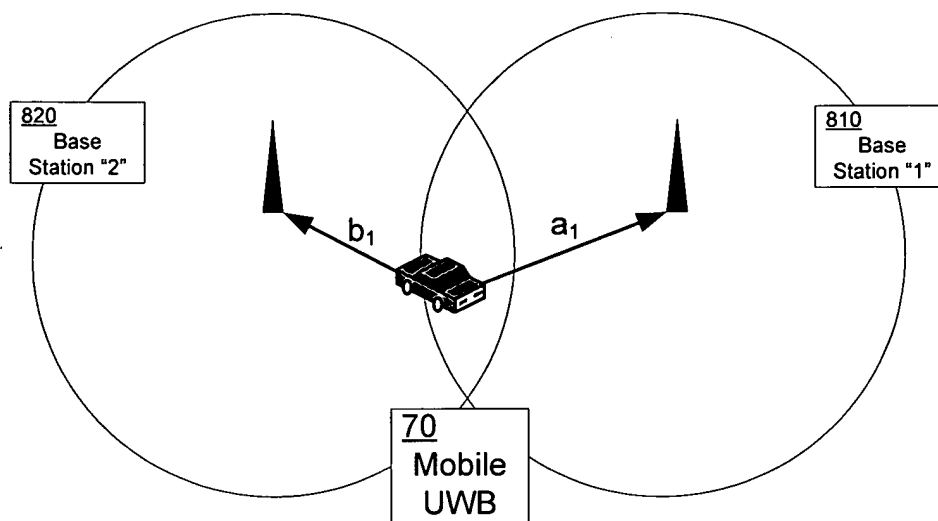
Soft Handoff Scenario #2: Mobile Unit to Base Station to New Base Station

FIG. 6



Soft Handoff Scenario #3: Performs Dynamic Power Range Linking

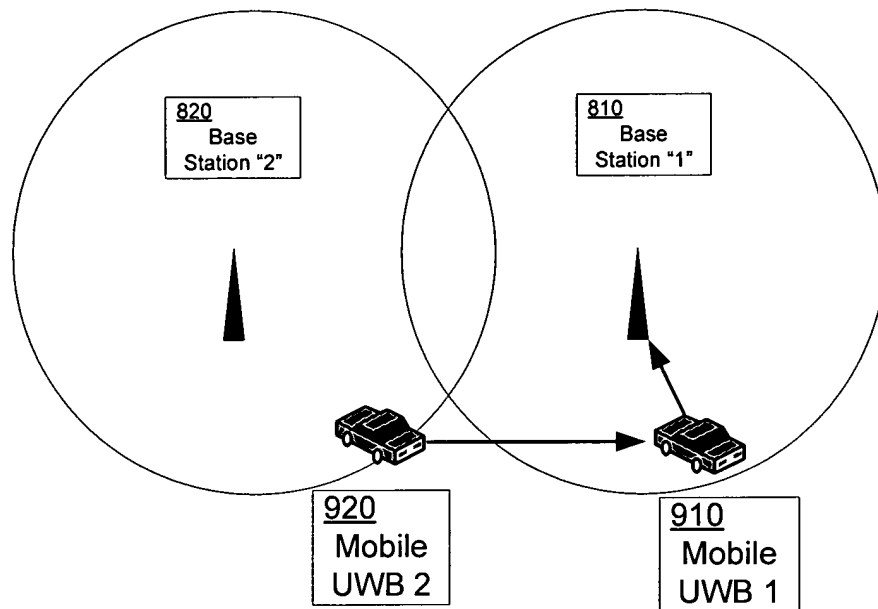
FIG. 7



Mobile UWB is leaving range of Base Station "1" and is now
within the range of Base Station "2"
(Transmission distances are indicated by a_1 and b_1)

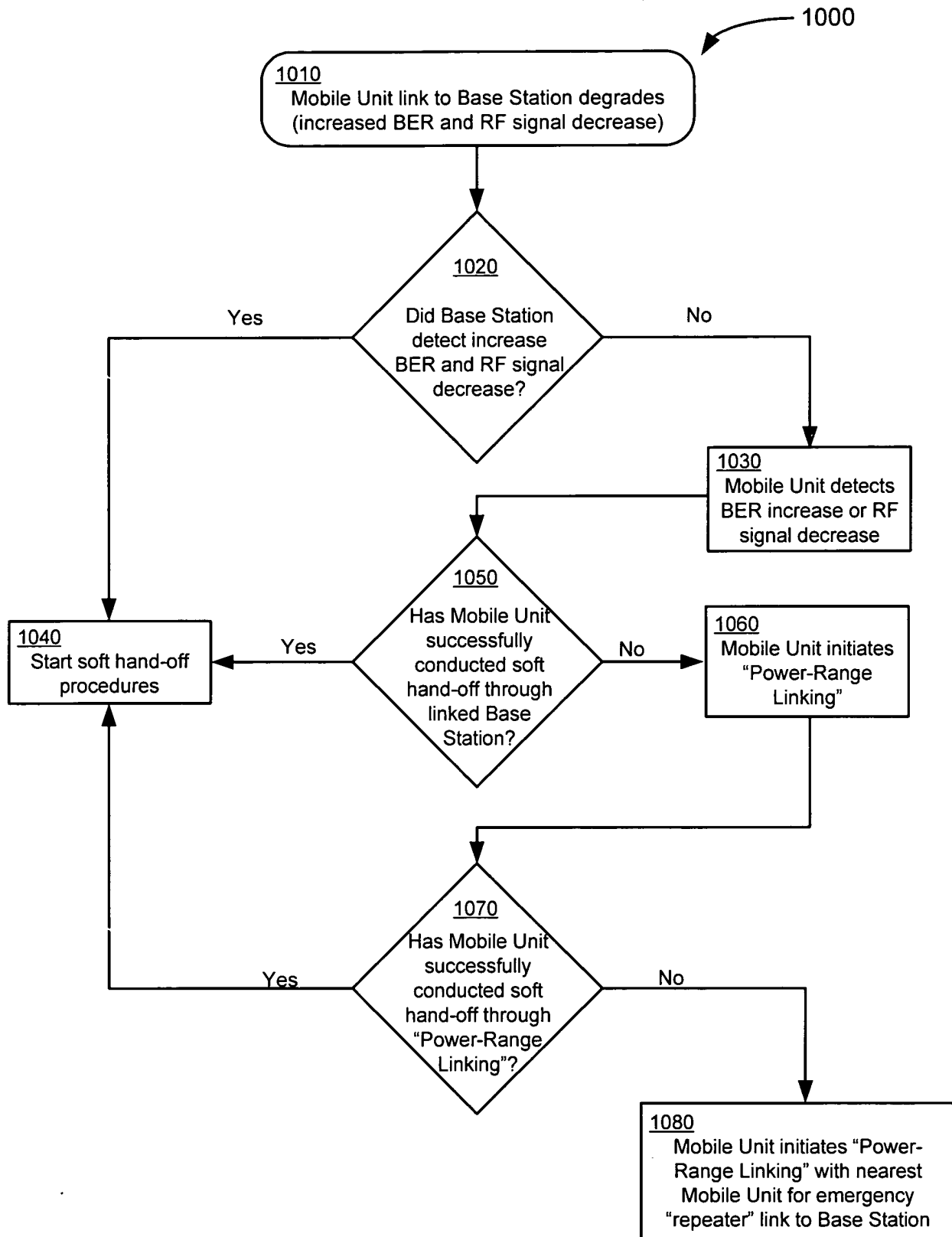
Power-Range Linking Model for soft hand-off
(Mobile leaving coverage of Base Station "2")

FIG. 8



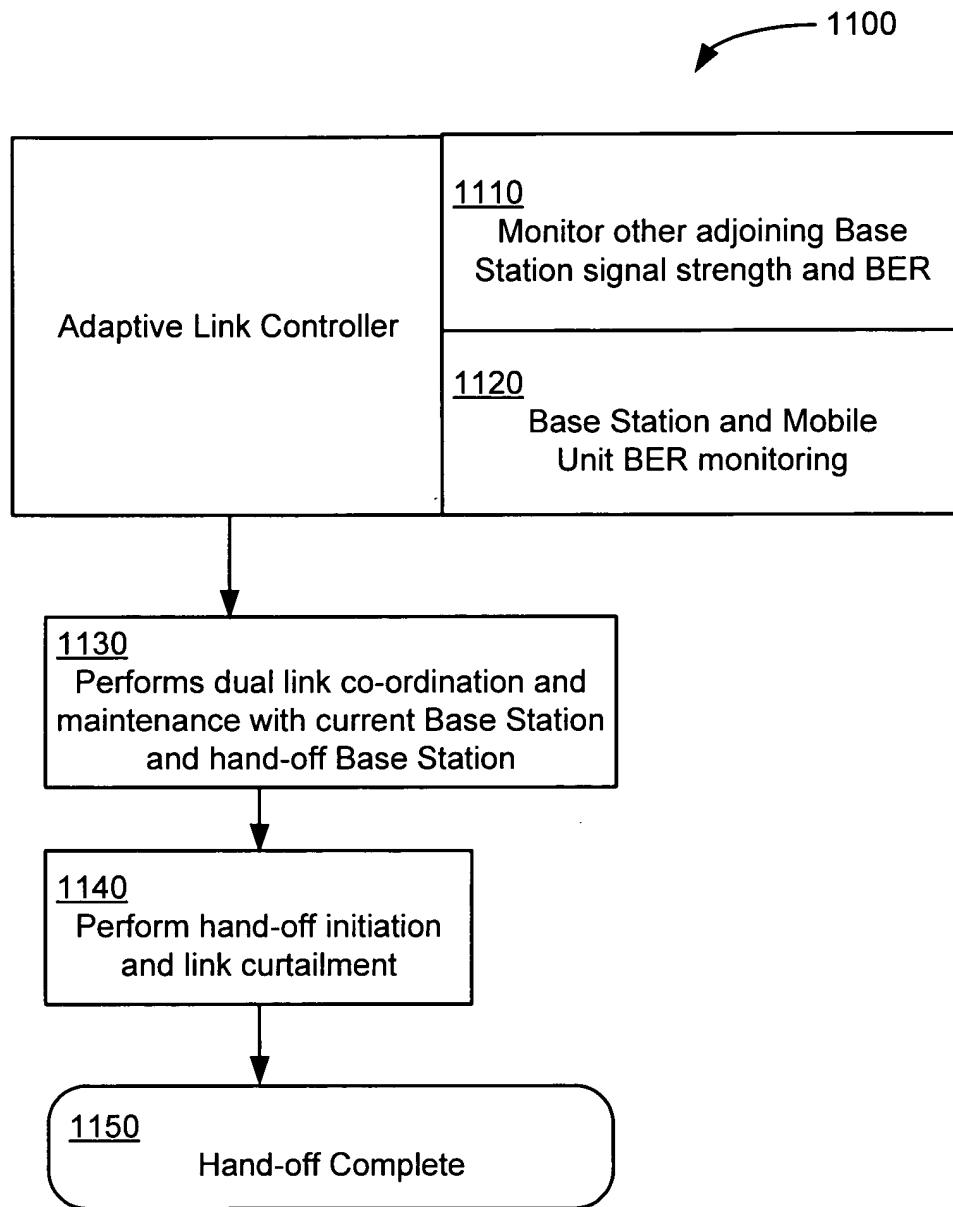
Soft hand-off Scenario #4
(Mobile Unit to Mobile Unit to Base Station, also providing emergency geo-locationing)

FIG. 9



Soft hand-off procedures for Scenarios 1 through 4

FIG. 10



Adaptive Link Controller

FIG. 11